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| 10/099,842 | 03/13/2002 | Jarkko Jouppi | 460-010872-US(PAR) | 4434 |

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| EXAMINER | |
|---|---|
| HUANG, WEN WU | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2682 | |

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/099,842 | JOUPPI ET AL. | |
| | Examiner | Art Unit | |
| | Wen Huang | 2682 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *4,5,8,12 and 13* is/are allowed.

6)☒ Claim(s) *1-3,6,7,9-11 and 14-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-3, 7, 9-11, 14, 15 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Rusch (US. 6,801,777).

Regarding claim 1, Rusch teaches a method for selecting (see Rusch, col. 5, lines 7-9) a quality of service (see Rusch, col. 3, line 53 and lines 7-8) for a data transmission connection between a wireless terminal and a mobile communication network (see Rusch, col. 3, lines 66-67),

in which wireless terminal at least one application is executed (see Rusch, col. 7, lines 55-56), and the application determines at least one parameter affecting the quality of service for said data transmission connection (see Rusch, col. 5, lines 18-21), wherein the properties of the wireless terminal (see Rusch, col. 5, line 41, "video display characteristics") affecting the data transmission connection (see Rusch, col. 5, lines 35-44) are examined and compared with at least one parameter (see Rusch, col. 5, line 47,

"video quality") affecting the quality of service determined by said application (see Rusch, col. 5, lines 44-51), to find out if any determined property of the wireless terminal restricts the quality of service of the data transmission connection with respect to any of said at least one parameter (see Rusch, col. 5, lines 47-54 and line 38-39, "system constraints". Rusch teaches determining if a higher bit-error-rate or lower signal-to-noise ratio maybe acceptable by examining and comparing video quality/one parameter determined by the application and video display capability/property of the wireless terminal).

Regarding claim 2, Rusch also teaches a method according to claim 1, wherein the properties of the wireless terminal affecting the data transmission connection are determined in the wireless terminal (see Rusch, fig. 1, component 118).

Regarding claim 3, Rusch teaches a method according to claim 1, wherein said comparison between the properties of the wireless terminal and at least one parameter affecting the quality of service determined by the application is made in the wireless terminal (see Rusch, fig. 1, component 112 and col. 5, lines 4-12).

Regarding claim 7, Rusch further discloses a method according to claim 1, wherein said at least one parameter affecting the quality of service is bit rate (see Rusch, col. 5, lines 25-26).

Regarding claim 9, Rusch teaches a communication system comprising means for selecting (see Rusch, col. 5, lines 7-9) a quality of service (see Rusch, col. 3, line 53 and lines 7-8) for a data transmission connection between a wireless terminal and a mobile communication network (see Rusch, col. 3, lines 66-67),

the wireless terminal comprising means for executing at least one application (see Rusch, col. 7, lines 55-56), and means for determining at least one parameter affecting the quality of service for said data transmission connection in the application (see Rusch, col. 5, lines 18-21),

wherein the communication system further comprises

means for determining the properties of the wireless terminal (see Rusch, col. 5, line 41, "video display characteristics") affecting the data transmission connection (see Rusch, col. 5, lines 35-44), and means for comparing said properties with at least one parameter (see Rusch, col. 5, line 47, "video quality") affecting the quality of service determined by said application (see Rusch, col. 5, lines 44-51), to find out if any determined property of the wireless terminal restricts the quality of service of the data transmission connection with respect to any of said at least one parameter (see Rusch, col. 5, lines 51-54 and line 38-39, "system constraints").

Regarding claim 10, Rusch further teaches a communication system according to claim 9, wherein the means for determining the properties of the wireless terminal

affecting the data transmission connection are provided in the wireless terminal (see Rusch, fig. 1, component 118). .

Regarding claim 11, Rusch also teaches a communication system according to claim 9, wherein the means for comparing said properties with at least one parameter affecting the quality of service determined by said application are provided in the wireless terminal (see Rusch, fig. 1, component 112 and col. 5, lines 4-12).

Regarding claim 14, Rusch also discloses a communication system according to claim 9, wherein said at least one parameter affecting the quality of service is bit rate (see Rusch, col. 5, lines 25-26).

Regarding claim 15, Rusch teaches a wireless terminal (see Rusch, fig. 1, component 100) for use in a communication system comprising

means for selecting (see Rusch, col. 5, lines 7-9) a quality of service (see Rusch, col. 3, line 53 and lines 7-8) for a data transmission connection between a wireless terminal and a mobile communication network (see Rusch, col. 3, lines 66-67),

the wireless terminal comprising

means for executing at least one application (see Rusch, col. 7, lines 55-56) and

means for determining at least one parameter affecting the quality of service for said data transmission connection in the application (see Rusch, col. 5, lines 18-21), wherein the wireless terminal further comprises

means for determining the properties of the wireless terminal (see Rusch, col. 5, line 41, "video display characteristics") affecting the data transmission connection (see Rusch, col. 5, lines 35-44), and

means for comparing said properties with at least one parameter (see Rusch, col. 5, line 47, "video quality") affecting the quality of service determined by said application (see Rusch, col. 5, lines 44-51), to find out if any determined property of the wireless terminal restricts the quality of service of the data transmission connection with respect to any of said at least one parameter (see Rusch, col. 5, lines 51-54 and line 38-39, "system constraints").

Regarding claim 17, Rusch further teaches a wireless terminal according to claim 15, wherein means for executing at least one application comprise

an application execution environment (see Rusch, fig. 1, components 112, 114, 116, 118 and 120), in which the determination of the properties of the wireless terminal (see Rusch, col. 5, line 41, "video display characteristics") affecting the quality of service (see Rusch, col. 5, lines 35-44), and the comparison of said properties with at least one parameter (see Rusch, col. 5, line 47, "video quality") affecting the quality of service determined by said application (see Rusch, col. 5, lines 44-51), are arranged to be performed (see Rusch, fig. 1, components 112, 114 and 118).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rusch in view of Smith et al (US. 6,088,732).

Regarding claim 6, Rusch teaches a method for selecting (see Rusch, col. 5, lines 7-9) a quality of service (see Rusch, col. 3, line 53 and lines 7-8) for a data transmission connection between a wireless terminal and a mobile communication network (see Rusch, col. 3, lines 66-67),

in which wireless terminal at least one application is executed (see Rusch, col. 7, lines 55-56), and the application determines at least one parameter affecting the quality of service for said data transmission connection (see Rusch, col. 5, lines 18-21), wherein the properties of the wireless terminal (see Rusch, col. 5, line 41, "video display characteristics") affecting the data transmission connection (see Rusch, col. 5, lines 35-44) are examined and compared with at least one parameter (see Rusch, col. 5, line 47, "video quality") affecting the quality of service determined by said application (see Rusch, col. 5, lines 44-51), to find out if any determined property of the wireless terminal restricts the quality of service of the data transmission connection with respect to any of said at least one parameter (see Rusch, col. 5, lines 47-54 and line 38-39, "system

constraints". Rusch teaches determining if a higher bit-error-rate or lower signal-to-noise ratio maybe acceptable by examining and comparing video quality/one parameter determined by the application and video display capability/property of the wireless terminal).

However, Rusch fails to teach that wherein if said comparison indicates that one or more properties of the wireless terminal, affecting the data transmission, restricts the quality of service of the data transmission connection, no information of this is transferred to the application.

But Smith et al teach a method for selecting a quality of service (see Smith et al, col. 1, lines 44-48) for a data transmission connection between a wireless terminal and a mobile communication network (see Smith et al, col. 2, lines 63-67),

wherein if a comparison indicates that one or more properties of the wireless terminal, affecting the data transmission, restricts the quality of service of the data transmission connection (see Smith et al, col. 12, lines 63-64), no information of this is transferred to the application (see Smith et al, col. 12, line 67; terminating the application inherently teaches that no information of said comparison is transferred to the application).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Rusch with the teaching of Smith et al in order to determine the quality of service for multimedia applications (see Smith et al, col. 1, lines 44-48).

3. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rusch as applied to claim 15 above, and further in view of Lintulampi (US. 6,177,804).

Regarding claim 16, Rusch teaches a wireless terminal according to claim 15.

However, Rusch fails to teach that wherein it comprises means for transmitting a connection request to a mobile communication network, and means for transmitting QoS parameters in said connection request.

But, Lintulampi teaches a wireless terminal (see Lintulampi, col. 1, line 5) comprises means for transmitting a connection request to a mobile communication network, and means for transmitting QoS parameters in said connection request (see Lintulampi, col. 4, lines 44-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Rusch with the teaching of Lintulampi in order to obtain a higher transmission rate (see Lintulampi, col. 2, lines 15-18).

***Allowable Subject Matter***

4. Claims 4, 5, 8, 12 and 13 allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 4, the combination of Rusch, Smith et al and Lintulampi teaches a method for selecting a quality of service for a data transmission connection between a

wireless terminal and a mobile communication network, in which wireless terminal at least one application is executed, and the application determines at least one parameter affecting the quality of service for said data transmission connection, wherein the properties of the wireless terminal affecting the data transmission connection are examined and compared with at least one parameter affecting the quality of service determined by said application, to find out if any determined property of the wireless terminal restricts the quality of service of the data transmission connection with respect to any of said at least one parameter.

However, any combination of Rusch, Smith et al and Lintulampi fails to teach that wherein if said comparison indicates that one or more properties of the wireless terminal, affecting the data transmission, restricts the quality of service of the data transmission connection, information of this is transferred to the application.

Regarding claim 12, the combination of Rusch, Smith et al and Lintulampi teaches a communication system comprising means for selecting a quality of service for a data transmission connection between a wireless terminal and a mobile communication network, the wireless terminal comprising means for executing at least one application and means for determining at least one parameter affecting the quality of service for said data transmission connection in the application, wherein the communication system further comprises means for determining the properties of the wireless terminal affecting the data transmission connection, and means for comparing said properties with at least one parameter affecting the quality of service determined by

said application, to find out if any determined property of the wireless terminal restricts the quality of service of the data transmission connection with respect to any of said at least one parameter.

However, any combination of Rusch, Smith et al and Lintulampi fails to teach that wherein it comprises means for transmitting the result of said comparison to the application.

Regarding claim 8, the combination of Rusch, Smith et al and Lintulampi teaches a method for selecting a quality of service for a data transmission connection between a wireless terminal and a mobile communication network, in which wireless terminal at least one application is executed, and the application determines at least one parameter affecting the quality of service for said data transmission connection, wherein the properties of the wireless terminal affecting the data transmission connection are examined and compared with at least one parameter affecting the quality of service determined by said application, to find out if any determined property of the wireless terminal restricts the quality of service of the data transmission connection with respect to any of said at least one parameter.

However, any combination of Rusch, Smith et al and Lintulampi fails to teach that wherein one or more QoS default profiles are stored in the wireless terminal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Response to Arguments*

Applicant's arguments, see sixth paragraph on page 10 and the bridging paragraph between pages 10 and 11, filed 11/08/04, with respect to the rejection(s)of claim(s) 1-3, 7, 9-11 and 14-17 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rusch, Smith et al and Lintulampi

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen Huang whose telephone number is (703) 305-6285. The examiner can normally be reached on 10am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (703) 308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

wwh

WH
3/25/05

LEE NGUYEN
PRIMARY EXAMINER